



**UNITED STATES PATENT AND TRADEMARK OFFICE**

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,437	02/10/2004	Yong Cheol Park	0465-1141P	1710
2292	7590	07/21/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH			PATEL, GAUTAM	
PO BOX 747			ART UNIT	PAPER NUMBER
FALLS CHURCH, VA 22040-0747			2655	

DATE MAILED: 07/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/774,437	PARK, YONG CHEOL	
	Examiner Gautam R. Patel	Art Unit 2655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.  
 2a) This action is **FINAL**.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-40 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_ is/are allowed.  
 6) Claim(s) 1-40 is/are rejected.  
 7) Claim(s) \_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. 09/480,107.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/10/04</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: ____.                                    |

## DETAILED ACTION

1. Claims 1-40 are pending for the examination.

### Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. § 119(a)-(d), in previous application which papers have been placed of record in the file.

### Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321<sup>©</sup> may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-14 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1-14 of

copending application Serial No. 09/480,107. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of the present application is much broader than copending applications claim 1

Claims 2-13 almost identical to claims 2-13 of the application 09/480,107. As to claims 14-40, since they are also fully disclosed in the application number 09/480,107; they are therefore considered rejected as non-statutory double patenting as set forth in the paragraphs here in above.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

#### **Claim Rejections - 35 U.S.C. § 102**

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 and 14-17 are rejected under 35 U.S.C. § 102(b) as being anticipated by Kulakowski et al., US. patent 5,303,219 (hereafter Kulakowski).

As to claim 1, Kulakowski discloses the invention as claimed, a method for formatting an optical recording medium [see Figs. 1-9, especially 8-9] including resetting the location information and formatting the optical recording medium, comprising the steps of:

(a) resetting the location information of the spare area in response to a formatting request to indicate at least that there is no spare area assigned; and

(b) formatting the optical recording medium in response to the formatting request at least to use the spare area as a user data area after formatting [ABSTRACT; col. 7, line 40 to col. 8, line 26].

5. The aforementioned claim 2, recites the following steps, inter alia, disclosed in Kulakowski:

determining if a spare area has been assigned prior to said resetting step (a) and said formatting step (b), wherein said steps (a) and (b) are performed if a spare area has been assigned [ABSTRACT; col. 7, line 40 to col. 8, line 26].

6. The aforementioned claim 3, recites the following steps, inter alia, disclosed in Kulakowski:

said resetting step (a) comprises converting the location information of the spare area to a predetermined value [col. 8, lines 27-56].

7. The aforementioned claim 4, recites the following steps, inter alia, disclosed in Kulakowski:

the predetermined value is a lowest possible address value [col. 8, lines 27-56].

8. The aforementioned claim 5, recites the following steps, inter alia, disclosed in Kulakowski:

the predetermined value is a highest possible address value [col. 8, lines 27-56].

NOTE: When addresses are selected inherently they cover start address and end address, which are by definition highest and lowest.

9. The aforementioned claim 6, recites the following steps, *inter alia*, disclosed in Kulakowski:

the predetermined value is a specific preset code [col. 8, lines 27-56].

10. As to claim 14, it is rejected for similar reasons set forth in the rejection of claim 1, supra.

11. As to claims 15-17, they are rejected for similar reasons set forth in the rejection of claims 2-4 respectively, supra.

#### Claim Rejections - 35 U.S.C. § 103

12. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-13 and 18-40 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kulakowski as applied to claims 1-6 and 14-17 above in view of AAPA [Applicants Admitted Prior Art].

As to claim 7, Kulakowski discloses all of the above elements, including using spare area as user area, formatting command and SLD and PDL. Kulakowski does

not specifically discloses details of the SDL and PDL, certification and to the extent claimed.

However, Kulakowski clearly discloses that the PDL and SDL are being used.

Also AAPA discloses:

said formatting step (b) includes registering sectors judged to have defects into a new PDL (primary defect list), if the optical recording medium is to be formatted with certification [paragraph 15-16].

Both Kulakowski, and AAPA are interested in providing disc structure arrangement with help of PDL and SDL.

Therefore, it would have been obvious to provide the system of Kulakowski with certification and associated details as taught by AAPA. The application or use of the certification and associated details as taught by AAPA would have been obvious, because these details performs the same function in the same way as the PDL and SDL of the of Kulakowski's system, and is an equivalent element. One of ordinary skill in the art would have recognized that the certification and associated details of PDL and SDL of AAPA was equivalent and an obvious alternative to PDL and SDL of system of Kulakowski.

13. The aforementioned claim 8, recites the following steps, *inter alia*, disclosed in AAPA:

formatting step (b) includes registering all sectors previously judged in an old SDL (secondary defect list) into a new PDL (primary defect list) if the optical recording medium is to be formatted without certification [paragraph 17].

14. The aforementioned claim 9, recites the following steps, inter alia, disclosed in AAPA:

the location information of the spare area is stored in a secondary defect list of the defect management area of the optical recording medium [paragraph 14].

15. The aforementioned claim 10, recites the following steps, inter alia, disclosed in AAPA:

the location information of the spare area includes start and end addresses of the spare area on the optical recording medium [fig. 4A and paragraph 12-13].

16. The aforementioned claim 11, recites the following steps, inter alia, disclosed in AAPA:

formatting step (b) further includes disposing of an old SDL (secondary defect list) existing prior to said formatting step (b), if the optical recording medium is to be formatted with certification [paragraph 16].

17. The aforementioned claim 12, recites the following steps, inter alia, disclosed in AAPA:

said formatting step (b) reformats the optical recording medium by moving defective sectors registered in a first list to a second list [paragraph 16-17].

18. The aforementioned claim 13, recites the following steps, inter alia, disclosed in Kulakowski:

the first list and second list are, respectively, an SDL (secondary defect list) and a PDL (primary defect list) for the optical recording medium [paragraph 6].

19. As to claims 18-19, they are rejected for similar reasons set forth in the rejection of claims 7-8 respectively, supra.

20. As to claims 20-21, they are rejected for similar reasons set forth in the rejection of claims 11-12 respectively, supra.

21. The aforementioned claim 22, recites the following steps, *inter alia*, disclosed in AAPA:

the spare area includes a primary spare area and a supplementary spare area, and the second information indicates the size of the supplementary spare area [paragraph 12-13].

22. The aforementioned claim 23, recites the following steps, *inter alia*, disclosed in AAPA:

the second information includes start and end addresses of the supplementary spare area [paragraph 12-13].

23. The aforementioned claim 24, recites the following steps, *inter alia*, disclosed in AAPA:

the start address of the supplementary spare area is reset to a predetermined value when said formatting step (b) occurs [paragraph 12-13].

24. The aforementioned claim 25, recites the following steps, inter alia, disclosed in Kulakowski:

(a) receiving a formatting request to format the optical recording medium; and (b) formatting the optical recording medium in response to the formatting request which allows use of the supplementary spare area as a user data area after formatting [ABSTRACT; col. 7, line 40 to col. 8, line 26].

As to rest of claim AAPA discloses:

wherein if the supplementary spare area was assigned before said formatting step (b), the method further comprising registering position information of a defective area included in the supplementary spare area into the first information of the defect management information, and resetting the second information indicating the size of the supplementary spare area [paragraph 121-3].

25. The aforementioned claim 26, recites the following steps, inter alia, disclosed in AAPA:

said step (b) is performed only when a supplementary spare area has been assigned [paragraph 12-13].

26. The aforementioned claim 27, recites the following steps, inter alia, disclosed in AAPA:

the first information includes a PDL (primary defect list) and a SDL (secondary defect list) [paragraph 6].

27. The aforementioned claim 28, recites the following steps, *inter alia*, disclosed in AAPA:

the supplementary spare area is extended from a fixed location close to a lead-out area to a variable inner location of the optical recording medium [paragraph 6-7].

28. As to claims 29-30, they are rejected for similar reasons set forth in the rejection of claims 23-24 respectively, supra.

29. As to claim 31, AAPA teaches start address and end address and that the start address and that the second information area is reset to a preset code. Kulakowski does not teach that preset code is value 00h or FFh.

"Official Notice" is taken that both the concept and the advantages of providing 00h or FFh as preset code are well known and expected in the art. It is well known in the art these codes refers to beginning and end codes for the memory locations. It would have been obvious to include 00h or FFh as preset codes to AAPA as these numbers easy to track and are usually used for start or end addresses within memory arrangement, and thereby saving time in accessing the memory location. These concepts are well known in the art and do not constitute a patentably distinct limitation, *per se* [M.P.E.P. 2144.03].

30. The aforementioned claim 32, recites the following steps, *inter alia*, disclosed in AAPA:

a spare area for replacing a defective area found during a formatting of the recording medium or at least after formatting, with an available replacement area;

and a defect management area including defect management information for managing a defective area, the defect management information including first information to indicate a defective unit found, and second information to indicate a size of the spare area [paragraph 5, 7, 11]

As to rest of the claim Kulakowski discloses:

wherein the spare area is changed to a usable user area when formatting, while the second information is reset to indicate that there is no longer a spare area assigned [ABSTRACT; col. 7, line 40 to col. 8, line 26].

31. The aforementioned claim 33, recites the following steps, *inter alia*, disclosed in AAPA:

the recording medium is a DVD-RAM [paragraph 3].

32. As to claims 34-40, they are claims corresponding to claims 27, 8, 22, 28, 23 24 and 31 respectively, and are therefore rejected for similar reasons set forth in the rejection of claims 27, 8, 22, 28, 23 24 and 31 respectively, supra.

**Other prior art cited**

33. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Jaquette et al. (US. Patent 5,293,565) "Format for .....".
- b. Gaudet et al. (US. patent 5,418,767) "Detection of over-usage of spare sectors in an optical disk".

- c. Kakihara et al. (US. patent 6,118,608) "Disk drive unit ...."

### Contact Information

34. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is 571-272-7625. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2650) where this application or proceeding is assigned is 703-872-9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Wayne Young can be reached on (571) 272-7582.

Any inquiry of a general nature or relating to the status of this application should be directed to the Electronic Business Center whose telephone number is 866-217-9197 or the USPTO contact Center telephone number is (800) PTO-9199.

Gautam R. Patel  
Primary Examiner  
Group Art Unit 2655

*AKP*  
GAUTAM R. PATEL  
PRIMARY EXAMINER

July 18, 2005